

Houghton Mifflin Harcourt
Math in Focus, The Singapore Approach, Grades K-2

Degree of Evidence regarding the Standards for Mathematical Practice:

Minimal Evidence

Summary of evidence:

1. **Make sense of problems and persevere in solving them.** Findings across the K-2 grade span are inconsistent for this practice. There was little evidence found for this practice in the Kindergarten and Grade 2 materials. However, the Grade 1 materials provide considerable support for the development of this standard. For example, the materials in Grade 1 ask students to construct an addition story from a given picture, which provides opportunities for students to make sense and meaning of the problem. Open-ended questions found in the “critical thinking” sections and the “Let’s practice” sections ask students to create their own problems. In both Kindergarten and Grade 2, this resource lacks evidence to support development of this practice.
2. **Reason abstractly and quantitatively.** There is very limited or no evidence to support this practice throughout this resource. There are very limited opportunities for students to represent a scenario symbolically. There were no opportunities found to support flexibly using properties when problem solving.
3. **Construct viable arguments and critique the reasoning of others.** There was no evidence cited in the sections reviewed to support this practice.
4. **Model with mathematics.** There was moderate evidence found in the Grade 1 materials of this practice, but there was minimal evidence found in the Kindergarten and Grades 2 materials. In Grade 1 many lessons are imbedded in real-world contexts and many models/tools are used in problem solving. Some evidence was found to model mathematics in the Kindergarten and Grade 2 materials, but overall the evidence suggests underdevelopment of this practice.
5. **Use appropriate tools strategically.** Reviewers found no evidence for students being given opportunities to use tools strategically. Students are directed as to which tool to use and are not given choices. No opportunities were identified where students were asked to consider strengths and weaknesses of tool selection. Technology is available (eBooks, online web resources, virtual manipulatives), but in the sampled materials and lessons the teacher selects the tools and prescribes their use.
6. **Attend to precision.** Little to no evidence was found to support the development of this practice throughout the sampled materials. Reviewers cited an example where precision was modeled in a lesson through explicit instruction, but students are not given opportunities to communicate about the degree of precision needed for a given context or to critique the precision used by others.
7. **Look for and make use of structure.** This practice is underdeveloped in this grade span. There is some evidence in lesson introductions of connecting the new lesson to prior learning, but the teacher develops and verbalizes the connections for the students. The resource does not provide opportunities for students to generate and make use of structure or to find generalizations and connections.
8. **Look for and express regularity in repeated reasoning.** There is no evidence of this practice in the sampled sections of this series.